

REMARKS

In view of the following discussion, none of the claims now pending in the application are anticipated or obvious under the provisions of 35 U.S.C. §§ 102 and 103. Independent claims 1, 5, 8 and 13 were amended to include various limitations of dependent claims 2 and 3. Support for the additional amendments may also be found in the Specification on at least paragraphs [0018] and [0019]. Accordingly, claims 2 and 3 are canceled without prejudice. In addition, other claims were amended for consistency in view of the amendments to the independent claims. No new matter was added. Thus, all of the claims are now in allowable form.

The Assignee thanks the Examiner for taking time out of his busy schedule to speak with the Assignee's representative, Chin B. Kim, Reg. No. 54, 220 on July 14, 2011. The amendments were made in accordance with the discussion to overcome the present rejection. However, upon receiving the response, the Examiner is encouraged to contact the Assignee's representative if the Examiner feels that a further discussion would clarify any outstanding issues.

I. REJECTION OF CLAIMS 1, 4-13 AND 15-21 UNDER 35 U.S.C. § 102

The Examiner has rejected claims 1, 4-13 and 15-21 in the Office Action as being anticipated under 35 U.S.C. § 102 by Aizawa et al. (U.S. Patent No. 6,931,238, issued on August 16, 2005, hereinafter referred to as "Aizawa"). The rejection is respectfully traversed.

Aizawa discloses a radio communication apparatus and antenna control method. A radio section multiplies modulated transmission signals A to D respectively by a carrier with a frequency of fA, fB, fC or fD, thereby performing the frequency conversion and outputs the signals to a switch. (See Aizawa, Abstract).

The Examiner's attention is directed to the fact that Aizawa fails to describe or to suggest the novel concept of switching between the first and second antennas in response to a predefined schedule of a sequence of scheduled packet bursts, wherein the predefined schedule is scheduled by a base station, or receiving by wireless transceivers scheduled communications from a transceiver at a transmission station in accordance with a predefined schedule of a sequence of scheduled packet bursts,

wherein the sequence of scheduled packet bursts comprises a first signal burst received via the first antenna and a second signal burst received via the second antenna after the first signal burst, wherein the first signal burst and the second signal burst comprise identical packets of a common message, wherein an output of the radio receiver associated with the first signal burst is stored in a first buffer and an output of the radio receiver associated with the second signal burst is stored in a second buffer and a representation of the common message is extracted by using a first symbol from the first buffer and a first symbol from the second buffer wherein the wireless transceivers are located at receiving stations having switched protocol diversity reception operational modes, wherein the predefined schedule is scheduled by the transmission station and wherein the first packet burst and the second packet burst comprise identical packets of a common message, as positively claimed. Specifically, independent claims 1, 5, 8, and 13 positively recite:

1. A radio receiver comprising:
first and second antennas connected to a radio frequency processing circuitry by a radio frequency switch; and
a radio frequency switch control in communication with the radio frequency switch, wherein the radio frequency switch control is a media access control processor that is synchronized with transmission of a base station, the radio frequency switch control for switching between the first and second antennas in response to a predefined schedule of a sequence of scheduled packet bursts, wherein the sequence of scheduled packet bursts is prescribed by a quality of service defined by a media access control protocol, wherein the predefined schedule is scheduled by the base station, wherein the sequence of scheduled packet bursts comprises a first signal burst received via the first antenna and a second signal burst received via the second antenna after the first signal burst, wherein the first signal burst and the second signal burst comprise identical packets of a common message, wherein an output of the radio receiver associated with the first signal burst is stored in a first buffer and an output of the radio receiver associated with the second signal burst is stored in a second buffer and wherein a representation of the common message is extracted by using a first symbol from the first buffer and a first symbol from the second buffer. (Emphasis added).
5. A method of maintaining a controlled quality of service in a wireless communication system, comprising:
receiving by wireless transceivers scheduled communications from a transceiver at a transmission station in accordance with a predefined schedule of

a sequence of scheduled packet bursts, wherein the sequence of scheduled packet bursts is prescribed by a quality of service defined by a media access control protocol, wherein the wireless transceivers are located at receiving stations having switched protocol diversity reception operational modes, wherein the predefined schedule is scheduled by the transmission station to switch between a first antenna and a second antenna;

enabling the first antenna to receive a first packet burst in accordance with the predefined schedule;

enabling the second antenna to receive a second packet burst after the first packet burst in accordance with the predefined schedule, wherein the first packet burst and the second packet burst comprise identical packets of a common message;

storing an output associated with the first packet burst in a first buffer;
storing an output associated with the second packet burst in a second buffer; and

processing a first symbol from the first buffer from associated with the first packet burst and a first symbol from the second buffer associated with the second packet burst into a representation of the common message. (Emphasis added).

8. A method of achieving a quality of service control in a wireless local area network communication system, comprising:

transmitting a message contained within a plurality of packet bursts occurring at spaced time intervals, wherein a first packet burst and a second packet burst of the plurality of packet bursts comprise identical packets of a common message;

receiving a first one of the packet bursts at a first antenna; and
receiving a second one of the packet bursts at a second antenna after the first one of the packet bursts in accordance with a predefined schedule, wherein the predefined schedule is prescribed by a quality of service defined by a media access control protocol, where the predefined schedule is scheduled by a base station and is used to select one of the first antenna and second antenna for receiving each of the packet bursts, wherein an output of a radio receiver associated with the first one of the packet bursts is stored in a first buffer and an output of the radio receiver associated with the second one of the packet bursts is stored in a second buffer and wherein a representation of the common message is extracted by using a first symbol from the first buffer and a first symbol from the second buffer. (Emphasis added).

13. A communication system, comprising:

a radio frequency switch control in communication with a radio frequency switch, wherein the radio frequency switch control is a media access control processor that is synchronized with transmission of a base station;
a transmitter; and

a receiver coupled to the transmitter, wherein the receiver is adapted for receiving a first signal burst by a first antenna and a second signal burst after the

first signal burst by a second antenna and responding to the two signal bursts to communicate a single unified message at the receiver, wherein the first and second signal bursts are sequentially separated in time in accordance with a predefined schedule, wherein the first and second signal bursts are prescribed by a quality of service defined by a media access control protocol, wherein the predefined schedule is scheduled by the base station, wherein the first signal burst and the second signal burst comprise identical packets of the single unified message, wherein the first and second antennas are sequentially enabled in accordance with the predefined schedule to communicate with a first buffer and a second buffer at the receiver and a representation of the single unified message is extracted by using a first symbol from the first buffer and a first symbol from the second buffer. (Emphasis added).

In one embodiment of the present disclosure, a method and system are for the reception of radio signals using a protocol assisted switched diversity antenna system. One aspect of the present disclosure is that the antennas are switched in response to packet bursts or signal bursts that are scheduled or ordered by time intervals. Namely, the antennas are switched in accordance to a predefined schedule of a sequence of scheduled packet bursts, wherein the predefined schedule is scheduled by a base station, or receiving by wireless transceivers scheduled communications from a transceiver at a transmission station in accordance with a predefined schedule of a sequence of scheduled packet bursts, wherein the sequence of scheduled packet bursts comprises a first signal burst received via the first antenna and a second signal burst received via the second antenna after the first signal burst, wherein the first signal burst and the second signal burst comprise identical packets of a common message, wherein an output of the radio receiver associated with the first signal burst is stored in a first buffer and an output of the radio receiver associated with the second signal burst is stored in a second buffer and a representation of the common message is extracted by using a first symbol from the first buffer and a first symbol from the second buffer, wherein the wireless transceivers are located at receiving stations having switched protocol diversity reception operational modes, wherein the predefined schedule is scheduled by the transmission station and wherein the first packet burst and the second packet burst comprise identical packets of a common message. Thus, the packet bursts are first scheduled and then sent to the receiver in accordance with that predefined schedule. Similarly, the switching of the antennas is also performed in

accordance with the predefined schedule.

In view of the clarifying amendments, Aizawa fails to anticipate independent claims 1, 5, 8 and 13 because Aizawa fails to describe or suggest the novel concept of switching between the first and second antennas in response to a predefined schedule of a sequence of scheduled packet bursts, wherein the predefined schedule is scheduled by a base station, or receiving by wireless transceivers scheduled communications from a transceiver at a transmission station in accordance with a predefined schedule of a sequence of scheduled packet bursts, wherein the sequence of scheduled packet bursts comprises a first signal burst received via the first antenna and a second signal burst received via the second antenna after the first signal burst, wherein the first signal burst and the second signal burst comprise identical packets of a common message, wherein an output of the radio receiver associated with the first signal burst is stored in a first buffer and an output of the radio receiver associated with the second signal burst is stored in a second buffer and a representation of the common message is extracted by using a first symbol from the first buffer and a first symbol from the second buffer wherein the wireless transceivers are located at receiving stations having switched protocol diversity reception operational modes, wherein the predefined schedule is scheduled by the transmission station and wherein the first packet burst and the second packet burst comprise identical packets of a common message. Aizawa discloses that different packets of information A-D are transmitted. (See Aizawa, col. 3, II. 4-6). In contrast, the claims specify that the transmitted packets, e.g., the first packet burst and the second packet burst, are identical packets of a common message.

Furthermore, Aizawa discloses that the preset transmission pattern transmits all data from each one of the four antennas at the same time. (See Aizawa, col. 4, II. 5-24, emphasis added). The pattern simply changes the frequency at which each antenna transmits for each time period. (See *Id.*) In stark contrast, the present claims specify that the antennas transmit or receive identical packets of a common message sequentially. That is, identical packets are transmitted or received by each one of the antennas one at a time, one after the other.

In addition, Aizawa fails to disclose using a different buffer associated with the first and second signal bursts and extracting a message as recited by the independent

claims. Therefore, independent claims 1, 5, 8 and 13 are clearly patentable and not anticipated by Aizawa.

Furthermore, dependent claims 4, 6, 7, 9-12 and 15-21 depend from claims 1, 5, 8 and 13, respectively, and recite additional limitations. As such, and for the exact same reason set forth above, claims 4, 6, 7, 9-12 and 15-21 are also patentable and not anticipated by Aizawa. As such, the rejection should be withdrawn.

II. REJECTION OF CLAIMS 2 AND 3 UNDER 35 U.S.C. § 103

The Examiner has rejected claims 2 and 3 in the Office Action under 35 U.S.C. § 103 as being unpatentable over Aizawa in view of Aaronson, et al. (U.S. Patent No. 6,363,062, issued March 26, 2002, hereinafter referred to as "Aaronson"). It should be noted that claims 2 and 3 were amended into the independent claims and canceled without prejudice. As such, the rejection is now moot.

Conclusion

Thus, all of the claims now fully satisfy the requirements of 35 U.S.C. §§ 102 and 103. Consequently, all the claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues in any of the claims now pending in the application, it is requested that the Examiner telephone Mr. Kin-Wah Tong, Esq. at (732) 542-2280 x130 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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